

Claims

1. A packaging container for integrated circuits
comprising

a tray for holding integrated circuits, and

5 a tray cover, wherein the composition of the tray cover
comprises a plastic material, an electrostatic dissipating
charge material, and a desiccating material for adsorbing
moisture contained within the packaging container.

10 2. The packaging container of Claim 1 further
comprising a humidity indicator device secured to the tray
cover, which indicator device determines a humidity level
within the packaging container.

15 3. The packaging container of Claim 2 wherein the
humidity indicator device is secured into an opening in the
tray cover.

4. The packaging container of Claim 1 wherein the
plastic material of the tray cover comprises a
polypropylene.

20 5. The packaging container of Claim 2 wherein the
humidity indicator device comprises a humidity indicator
element and a system for securing the humidity indicator
element to the tray cover.

6. The packaging container of Claim 5 wherein the
humidity indicator element comprises a hydrophillic blotter

substrate onto which a humidity indicator solution has been placed.

7. The packaging container of Claim 6 wherein the humidity indicator solution comprises cobalt chloride.

5 ~~8. The packaging container of Claim 2 wherein the humidity indicator device is secured to the tray cover using a clear, plastic disk mounted within the opening in the tray cover.~~

10 9. The packaging container of Claim 1 further comprising a water and moisture-proof barrier bag into which the tray is secured.

15 10. A packaging container for integrated circuits comprising

a tray for holding integrated circuits,

15 a tray cover, wherein the composition of the tray cover comprises a plastic material, an electrostatic dissipating charge material, and a desiccating material for adsorbing moisture contained within the packaging container,

20 a humidity indicator device secured to the tray cover for determining the humidity level within the packaging container; and

a moisture-proof barrier bag into which the tray and the tray cover are placed.

11. The packaging container of Claim 10 wherein the

humidity indicator device is secured into an opening in the tray cover.

12. The packaging container of Claim 10 wherein the composition of the tray cover further comprises an anti-static material.

13. The packaging container of Claim 10 wherein the plastic material of the tray cover comprises a polypropylene.

14. The packaging container of Claim 10 wherein the humidity indicator device comprises a humidity indicator disk and a system for securing the humidity indicator disk to the tray cover.

15. The packaging container of Claim 14 wherein the humidity indicator disk comprises a hydrophillic blotter substrate onto which a humidity indicator solution has been placed.

16. The packaging container of Claim 15 wherein the humidity indicator solution comprises cobalt chloride.

17. The packaging container of Claim 11 wherein the humidity indicator device is secured to the tray cover using a clear plastic disk mounted within the opening in the tray cover.

18. A process for filling and shipping of a packaging container containing integrated circuits comprising

introducing integrated circuits into a tray,
baking the integrated circuits while in the tray to
reduce the water content in the integrated circuits,

securing a tray cover over the tray, wherein the tray
cover is comprised of a plastic material, an electrostatic
charge dissipating material and a desiccating material for
absorbing moisture contained within the packaging container;
and

placing the covered tray containing integrated circuits
within a moisture-proof barrier bag.

✓ 19. A process for filling and shipping of a packaging
container containing integrated circuits, comprising

introducing dry, baked integrated circuits into a
shipping tray,

securing a tray cover over the tray, wherein the tray
cover is comprised of a plastic material, an electrostatic
charge dissipating material and a desiccating material for
absorbing moisture contained within the packaging container;
and

placing the covered tray containing dry baked
integrated circuits within a moisture-proof barrier bag.

20. The process of Claim 18 wherein the tray cover
further comprises a humidity indicator device.

21. The process of Claim 19 wherein the tray cover
further comprises a humidity indicator device.